

Draft Five Year Schedule of Prioritized NCSP Experiments

NCSP Technical Seminar,
March 1, 2011
Oakridge, TN



Integral Measurement Capabilities

- Critical Experiment Facility (CEF) Staff continued making limited subcritical and fundamental physics measurements during CEF construction
- CEF is scheduled to start nuclear operations by April 2011 for criticality experiments and training
- Sandia National Laboratory will continue to perform water moderated criticality experiments and training
- The US DOE continues collaborations with the French government for joint measurements/data acquisition
- VNIITF, Russia may continue to perform experiments for US requested data needs if appropriate



Current Status of Proposed Experiments

- To Date: Submitted at: <http://ncsc.llnl.gov/>
- 10 Subcritical CEF experiments requests approved/2 awaiting more data
- 1 VNIITF critical experiment in progress/1 awaiting approval
- 1 SILENE critical experiment in progress
- 1 Sandia critical experiment in progress/1 approved/2 awaiting more data
- 5 stockpile science experiment requests approved/3 awaiting approval or more data
- 5 NCT experiment requests approved
- 4 NA-30 experiment requests approved
- 7 additional CEF critical experiment requests approved/2 awaiting more data



Critical/Subcritical Experiment Priorities

- NA-11/NA-12
- NA-40
- NA-20
- NA-30
- Programmatic Criticality Safety Needs
- EM
- NE
- Long Standing Criticality Physics Discrepancies



Current Critical Experiment Requests - 2011 CEF

Priority	Comments	Record No.	Request Date	Requestor Name	Experimental Request Title	Status
2011-1	This will be the first PLANET run in its new environment. This shall be done as a stand-alone experiment and is absolutely essential to determine system operability and characteristics of the new environment before proceeding with new experiments.	137	10/11/2010	White, Morgan C	High Precision HEU Critical Assembly Measurements To Understand Reproducibility	CED-1 Pending
2011-2a	This experiment will be done AFTER FLATTOP startup is completed. Flattop startup shall be done as a stand-alone experiment and is absolutely essential to determine system operability and characteristics of the new environment before proceeding with new experiments. Performed concurrent w/144. Priority to understand facility counting and chemistry	136	9/30/2010	Bredeweg, Todd	Reaction rate and fission-product yield measurements in Pu-239 and U-238,235	CED-1 Pending
2011-2b	This experiment will be done AFTER FLATTOP startup is completed. Flattop startup shall be done as a stand-alone experiment and is absolutely essential to determine system operability and characteristics of the new environment before proceeding with new experiments. Performed concurrent w/136 outside of Flattop.	144	11/5/2010	Church, Jennifer A	Time Dependent Assay of Activation Foils	CED-0 Pending



What's Next?

- Complete requests awaiting data
- Approve remaining requests or remove them from the system
- Assign Milestones to EACH C_EdT step of the process
- Document in the FY2012-2016 5-Year Plan in Appendix D Gant Chart
- Start performing Critical Experiments at CEF!



Questions?

